

CLAIMS

1. A rear package shelf system (5) for a convertible vehicle (1) with a folding hard roof (2), this system (5) comprising a shelf (6) adapted so as to cover in its normal position, the space located behind the back (8) of the corresponding seats (9), and means for moving this shelf (6) toward a retracted position in order to allow for the passage of the components (3, 4) of the roof (2) toward their folded position inside the rear trunk (11) of the vehicle (1), underneath the hood (12, 220) of this trunk, characterized in that it includes a second shelf (21) attached to said hood (12) underneath it and adapted so as to be positioned, in the position of the closed roof above the passenger compartment of the vehicle, entirely underneath this hood, and means for moving and guiding said second shelf (21) toward the front of the vehicle (1) in order to fill, in the folded position of the roof, the space between the back (8) of the corresponding seats (9) and the front edge (24) of said hood (12), by protruding at least partly out of the latter.

2. The rear package shelf system according to claim 1, characterized in that the hood is adapted so

as to pivot, at least partly, both toward the front and toward the rear, via front (131, 233) and rear (132, 229, 231) pivot groups adapted so as to cause this hood to pivot from the rear to the front in order to access  
5 the inside of the trunk (11) or from the front to the rear, respectively, in order to store the roof in at least one portion of this trunk, in a folded condition of the roof, the second shelf (21) being attached to said hood (12, 220), underneath it.

10       3. The rear package shelf system according to any of claims 1 or 2, characterized in that the first shelf (6) is mounted so as to pivot downwards and rearwards around an axis (26) located near its rear edge (27) so as to be adapted to being stored under the rear roof  
15 component (3) when the roof (2) is in its folded position.

20       4. The rear package shelf system according to any of claims 1 to 3, the second shelf (21) having, in the longitudinal direction (22, 111) of the vehicle (1), a larger dimension than the corresponding dimension of the hood (12) of the rear trunk (11), characterized in that the second shelf (21) includes a front component (21a) and a rear component (21b) mobile relatively to the front component (21a) so that the second shelf (21)  
25 completely houses underneath said hood (12), and in that the system (5) includes adapted means for moving the rear component (21b) relatively to the front component (21a) when the second shelf (21) is moved rearwards toward its stored position underneath the hood (12), and for putting back into place said rear component (21b) substantially aligned with the front

component (21a) when the second shelf (21) is moved forwards toward its extended position.

5. The rear package shelf system according to claim 4, characterized in that the rear component (21b) 5 is pivotably or slidably mounted onto the rear end (36) of the front component (21a).

6. The rear package shelf system according to any of the preceding claims, characterized in that the second shelf (21), on each side of the vehicle, is 10 firmly attached to a carriage (41) which moves along the respective guiding unit (42) substantially extending longitudinally underneath the hood (12) of the rear trunk (11).

7. The rear package shelf system according to 15 claim 6, characterized in that the second shelf (21) is mounted relatively to each carriage (41) via means adapted so as to allow an upward movement of the rear of the second shelf (21) so as to be pressed against the front edge (24) of the hood (12) when the second 20 shelf (21) reaches its extended position.

8. The rear package shelf system according to claim 6 or 7, characterized in that each guiding unit (42) is selected from a slide or a rack or a rail, and is in one single piece or of the telescopic type.

25 8. The rear package shelf system according to any of the preceding claims, characterized in that it includes means for locking each shelf component (21a, 21b) in the extended position of the second shelf (21).

10. The rear package shelf system according to 30 claims 4 and 8, characterized in that:

\* each guiding unit comprises a first telescopic slide (100) including three arms (101, 103, 105):

- a first arm (101) attached to the front component (21a) of the second shelf (21),

5 - a second arm (103) engaging with the first arm and with the third arm (105) respectively via a cable (113) attached to return pulleys (115, 117) and a threaded rod (127) attached to nuts (129), the second arm comprising a cam (123) acting on the front 10 component (21a) of the second shelf to cause the rear of this front component to pivot upwards, in the front extended position of the second shelf (21),

- the third arm (105) being further engaged with a motorized driving means (131), via a rod (133) attached 15 to a rack & pinion assembly (135),

\* and the front and rear components of the second shelf (21) are slidably mounted one relatively to the other, along said longitudinal direction (22, 111) of the vehicle and along second slides (56).

20 11. The rear package shelf system according to any of the preceding claims, characterized in that the first shelf (6) has a mat appearance, on its upper face, whereas the second shelf (21; 21a, 21b) is glossy, at least partly.

25 12. A vehicle equipped with the rear package shelf system according to any of the preceding claims.